

## CLAIMS

What is claimed is:

- 1 1. A method for network-based configuration of a programmable logic device,  
2 comprising the steps of:
  - 3 (a) initiating a default application on a programmable logic device;
  - 4 (b) sending a file request for configuration data from the logic device to a server  
5 located remotely from the logic device utilizing a network;
  - 6 (c) receiving the configuration data from the network server;
  - 7 (d) utilizing the configuration data for configuring the logic device to run a second  
8 application; and
  - 9 (e) running the second application on the logic device.
- 1 2. A method as recited in claim 1, wherein the configuration data is received in the  
2 form of a bitfile.
- 1 3. A method as recited in claim 1, wherein the logic device includes at least one  
2 Field Programmable Gate Array (FPGA).
- 1 4. A method as recited in claim 3, wherein a first FPGA receives the configuration  
2 data, wherein the first FPGA configures a second FPGA utilizing the  
3 configuration data.
- 1 5. A method as recited in claim 3, wherein the logic device includes first and  
2 second FPGA's that are clocked at different speeds.
- 1 6. A method as recited in claim 1, wherein the default application and the second  
2 application are both able to run simultaneously on the logic device.

1 7. A method as recited in claim 1, wherein the logic device further includes at least  
2 one of a display screen, a touch screen, an audio chip, an Ethernet device, a  
3 parallel port, a serial port, a RAM bank, and a non-volatile memory.

1 8. A computer program product for network-based configuration of a  
2 programmable logic device, comprising:  
3 (a) computer code for initiating a default application on a programmable logic  
4 device;  
5 (b) computer code for sending a file request for configuration data from the logic  
6 device to a server located remotely from the logic device utilizing a network;  
7 (c) computer code for receiving the configuration data from the network server;  
8 (d) computer code for utilizing the configuration data for configuring the logic  
9 device to run a second application; and  
10 (e) computer code for running the second application on the logic device.

1 9. A computer program product as recited in claim 8, wherein the configuration  
2 data is received in the form of a bitfile.

1 10. A computer program product as recited in claim 8, wherein the logic device  
2 includes at least one Field Programmable Gate Array (FPGA).

1 11. A computer program product as recited in claim 10, wherein a first FPGA  
2 receives the configuration data, wherein the first FPGA configures a second  
3 FPGA utilizing the configuration data.

1 12. A computer program product as recited in claim 10, wherein the logic device  
2 includes first and second FPGA's that are clocked at different speeds.

1 13. A computer program product as recited in claim 8, wherein the default  
2 application and the second application are both able to run simultaneously on the  
3 logic device.

1 14. A computer program product as recited in claim 8, wherein the logic device  
2 further includes at least one of a display screen, a touch screen, an audio chip, an  
3 Ethernet device, a parallel port, a serial port, a RAM bank, and a non-volatile  
4 memory.

1 15. A system for network-based configuration of a programmable logic device,  
2 comprising:  
3 (a) logic for initiating a default application on a programmable logic device;  
4 (b) logic for sending a file request for configuration data from the logic device to a  
5 server located remotely from the logic device utilizing a network;  
6 (c) logic for receiving the configuration data from the network server;  
7 (d) logic for utilizing the configuration data for configuring the logic device to run a  
8 second application; and  
9 (e) logic for running the second application on the logic device.

1 16. A system as recited in claim 15, wherein the configuration data is received in the  
2 form of a bitfile.

1 17. A system as recited in claim 15, wherein the logic device includes at least one  
2 Field Programmable Gate Array (FPGA).

1 18. A system as recited in claim 17, wherein a first FPGA receives the configuration  
2 data, wherein the first FPGA configures a second FPGA utilizing the  
3 configuration data.

- 1 19. A system as recited in claim 17, wherein the logic device includes first and
- 2 second FPGA's that are clocked at different speeds.
- 1 20. A system as recited in claim 15, wherein the default application and the second
- 2 application are both able to run simultaneously on the logic device.
- 1 21. A system as recited in claim 15, wherein the logic device further includes at
- 2 least one of a display screen, a touch screen, an audio chip, an Ethernet device, a
- 3 parallel port, a serial port, a RAM bank, and a non-volatile memory.